

PHENIX WEEKLY PLANNING

8/14/2008

Don Lynch

Shutdown '08 Schedule

RPC Factory:

Prototype C tests

Prototype D Tests

Dark Current test stand

Mu Trigger FEE upgrade:

Station 2/3 scaffolding

Station 1 scaffolding

Rack assembly

LV cable prep

Optical cable prep

N&S platforms Fabricate & install

Rebuild Bridge & Eyebrow

Prep work for platforms (water/elec)

LV cable installation

optical cable installation

FEE installation N&S sta's. 1,2 & 3

Complete

gaps & module frames received
on schedule for 9/15 installation
in design due 9/30

Done

Done

in progress finish North by 8/15, install by
North by 8/22, install South by 9/30

Done

In progress

fabrication complete, North platform
is installed, install South by 9/30 (Pearson)

Complete by 9/30

in progress finish by 8/22

Complete by 8/29

Done

Aug-Sep.

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Mu Trigger FEE Upgrade (cont'd):

FEE water and dry air installation
 Install S rack cooling & electric
 Install FEE's in MMS for RPC test
 Rack room electronics, etc.
 Final rack utilities
 Disassemble station1 scaffold
 Testing

RPC engineering & safety review

RPC proptotype installation:

Prep work

move (7) MuID pipes

move gap 5 south cable tray

Rack prep

RPC prototype gas system

Move shielding for installation

RPC prototype cable routing & support

Modify crystal palace & vapor barrier

RPC prototype install

(RPC2 - PHENIX)

(RPC3 - C. Pearson)

Aug-Sep

Oct.

Nov.

Sep.- Oct.

Sep.-Oct

complete by Oct 15

Sep.-Nov. Complete by 11/15

Done

complete by Oct 31

Complete by Aug 29

July - Aug

July - Sep

July - Aug

July - Aug

Sep. - Oct.

Sep. - Oct.

Shutdown '08 Schedule, cont'd

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RPC proptotype installation (cont'd):

Install rack in tunnel south

Replace tunnel shielding/Vapor Barrier

Connect electronics/gas

Sep.

Nov. (C. Pearson)

Sep. - Nov.

MuTr Decapacitations (Sta. 1 N and MMN)

Station 1N Done Sta, 3N in progress/
finish by 8/15

Fan Tray maintenance

in progress (on going fill-in)

PC1 west work (needs planning)

Oct. 15

CM Crane Install

Oct. 20

HBD Install

Oct. 27

DC East?/West Repairs

Nov. 15

Remove all inst'n equipment

Sta 2/3 scaffolds

Remove by 11/15

all other testing equipment

Remove by 12/1

Prep for shutdown 2009

Gap 5 N piping and cable tray re-loc.

Oct. - Dec.

Gap 2 N cable tray & crate re-mounts

Oct. - Dec.

Shutdown '08 Schedule, cont'd

Prep for run 9

Begin run 9 Prep	12/1/09
Install all lampshades	Complete by 11/26
Roll in EC	12/22
Pink/White/Blue sheets	12/29
Close shield wall	12/31

Cryo Start up

1/1/09

Flammable Gas/start shifts

1/11/09

Start physics

1/18/09

End Run 9

6/30/09

Coming soon: VTX, FVTX and NCC work

Shutdown '08 Electrician Work

1) Run Power to new MuTrgr FEE racks on MMN and MMS - *Final design of the reworked North Muon Power Distribution System is set. Nearly all material acquired without cost. Paul is m revising the One-Line electrical drawing. CAD approval required...maybe by **next** week. Effort should take ~ 1 week. **The new power cable feed to the MuTrigger rack is installed (2 cables, 1 spare) with no connection to the panel down below. The new North side power panel is installed on the IR North east corner wall. The new 75 KVA transformer for the entire North Arm service is reconditioned and tested satisfactory. The power for the South RPC tunnel Rack(s) to be taken from an existing (spare) breaker in the Muon Tracker power panel. This should take less than 1 day to install.** NO CHANGE*

***PHENIX electrician needs to install vertical section of cable tray from North Magnet Lampshade to underside of new rack platform. CAD concurrence for construction details (Pearson) is required.** COMPLETED*

MuTrigger LV Rack construction to require 4 man days to complete starting Monday 8/11. See line 5 for update.

2) Install power feeds to RPC north & south tunnel racks from IR power panels. – *Plan is to run the cables from the IR to the North tunnel rack locations. The south RPC rack power can be taken from the existing (spare) breakers in the SMI power panel located on the IR south west wall. These cable runs may take a few days to complete due to new power tray runs required into the tunnel areas. **Not done due to lack of manpower – working on other higher priority items.***

Shutdown '08 Electrician Work, Cont'd.



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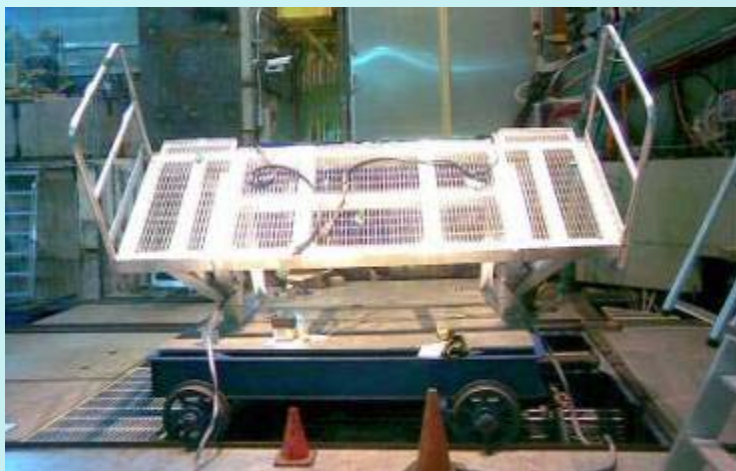
- 3) Install new UPS in Gas mixing house. **Not done due to lack of manpower – working on other higher priority items.**
- 4) Install power and signal cable tray (ceiling suspended) for new DCM rack row – north of existing DCM racks. - ***on Hold until new floor plan is determined***
- 5) Assist in signal and LV cable installation for MuTr/RPC upgrades as necessary. **Work in progress – Optical and LV cables installed. LV cables (rack end) are coiled on platform deck next to LV rack mount location. Optical patch rack installed with some cables connected into rack. Work on LV rack continues – not expected to be completed until later next week.**
- 6) Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
 - a) Remove existing 15KVA transformer and install 45KVA unit.
 - b) Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels.

- ***This job is on hold. No new racks in CM this year.***
- 7) Install 120 volt AC power drops into new control room annunciator alarm rack (rack room). **Not done due to lack of manpower – working on other higher priority items.**
- 8) **Ordering parts for South MuTrigger LV rack. Rack plumbing complete. Internal wiring to start maybe end of next week.**
- 9) **Discussions started with Chi and Steve Boose concerning RPC prototype rack for south tunnel.**

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New FEE Platforms & Modified Bridge Parts

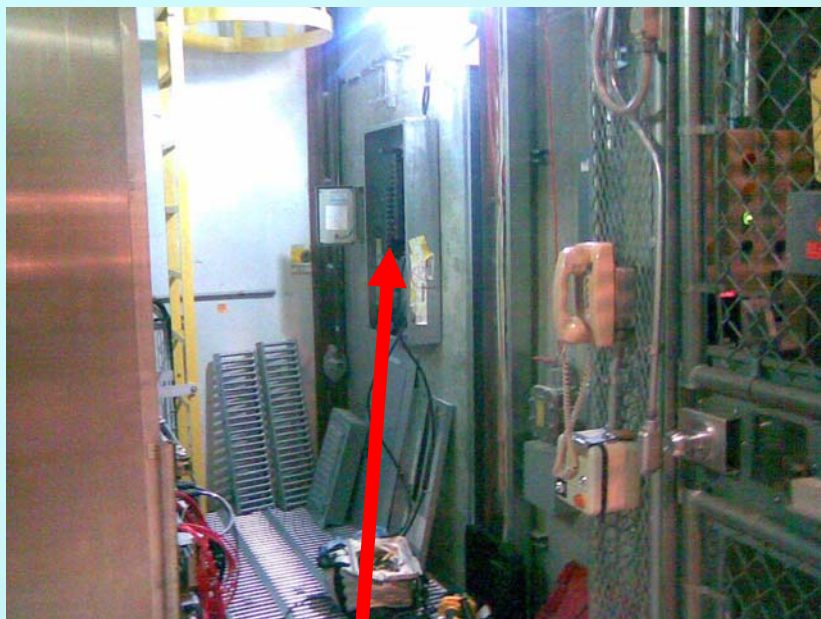
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MuTrigger FEE Rack Utilities

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North FEE & Tunnel Electric Supply



Tees and Valves

MuTrigger FEE Installation Prep

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North & South Rack Prep



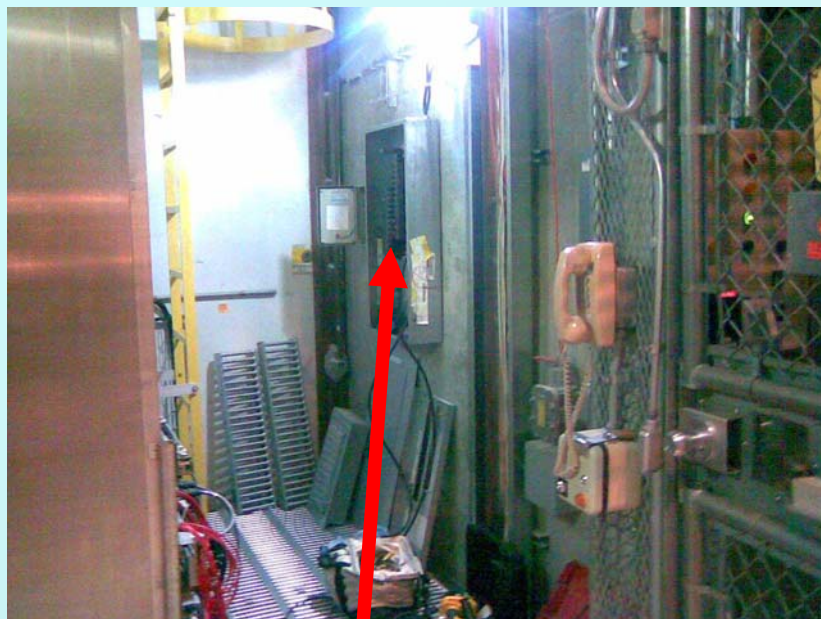
First Chasis shipment has arrived



Currently under leak test

MuTrigger FEE Installation Prep

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North FEE & Tunnel Electric Supply



Station 1 FEE Support structure

MuTrigger FEE Installation Prep

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North FEE Rack Platform is in



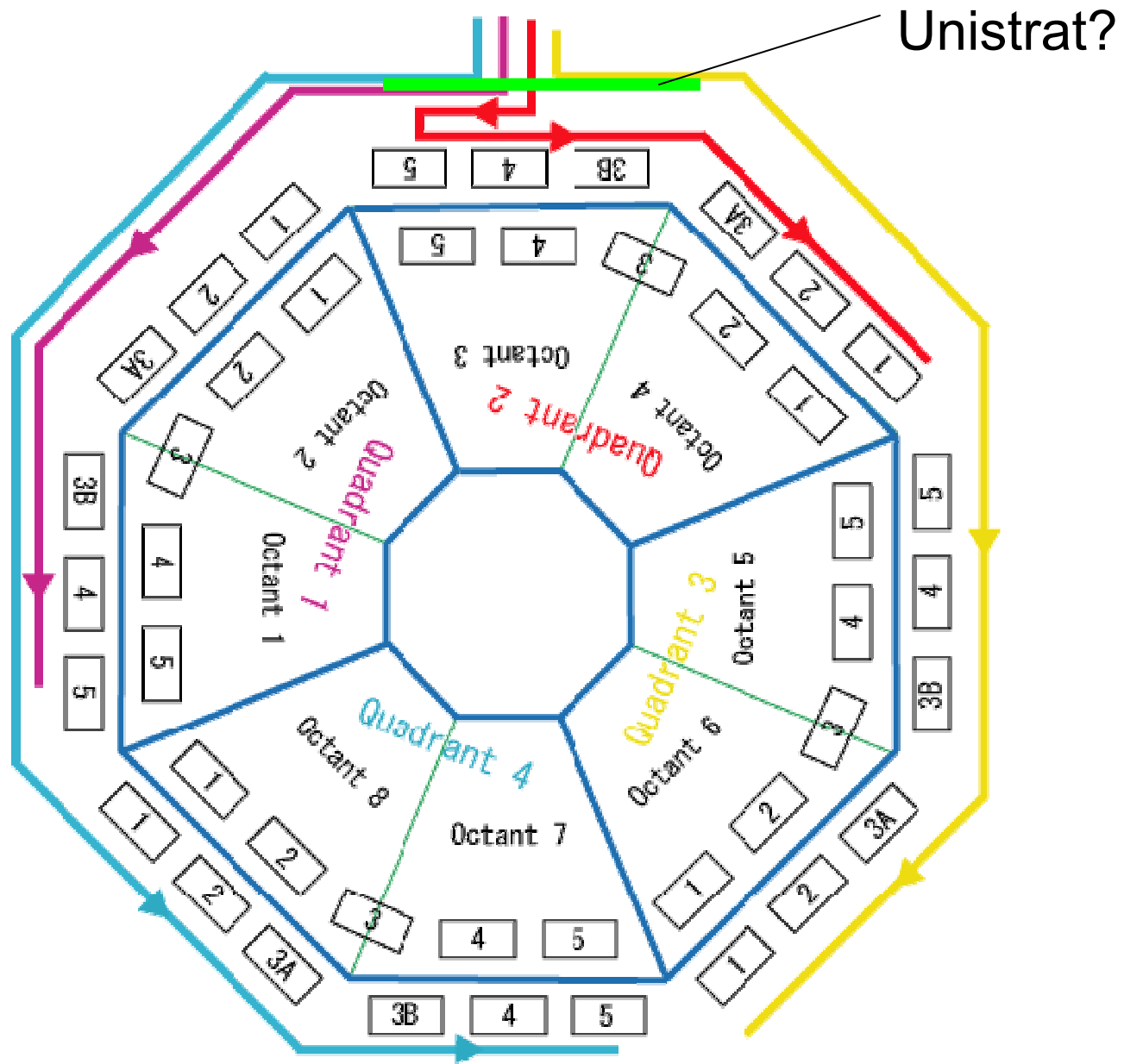
Temporary Access to Rack Platform is in

Cable Status

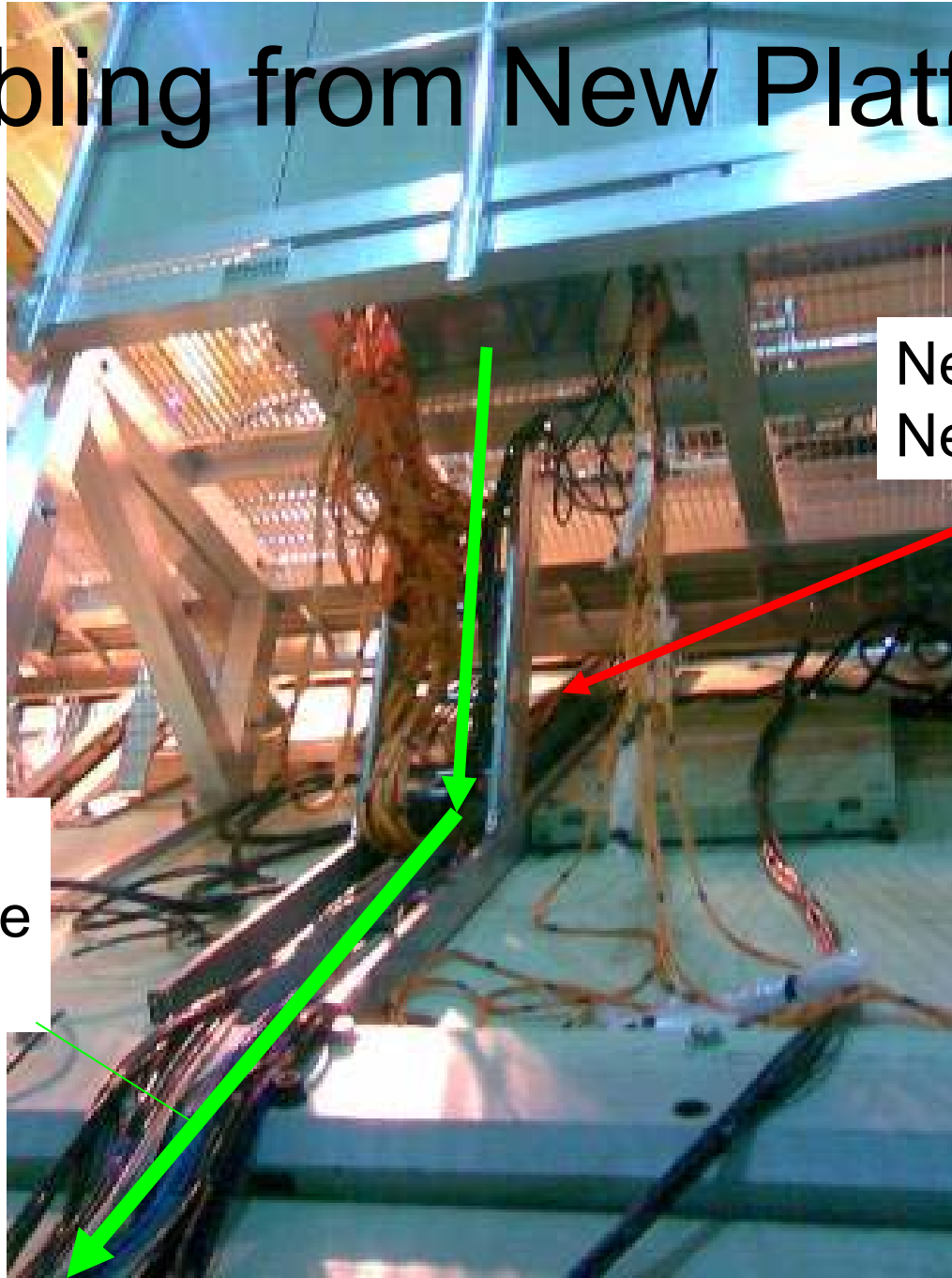
Cabling Status

- Station-2 & Station-3 Cables are Installed from inside magnet to Patch Bays @ Platform
- New LV Rack Ready (next week) → Establish connections LV cables inside rack → New Cable Trays?
- Station-1 fibers, LV cables to be installed next week
- 5 more fiber trunk cables to come (end of Aug.)

Station-1 Cable Route



Cabling from New Platform



Need to mount
New cable tray?

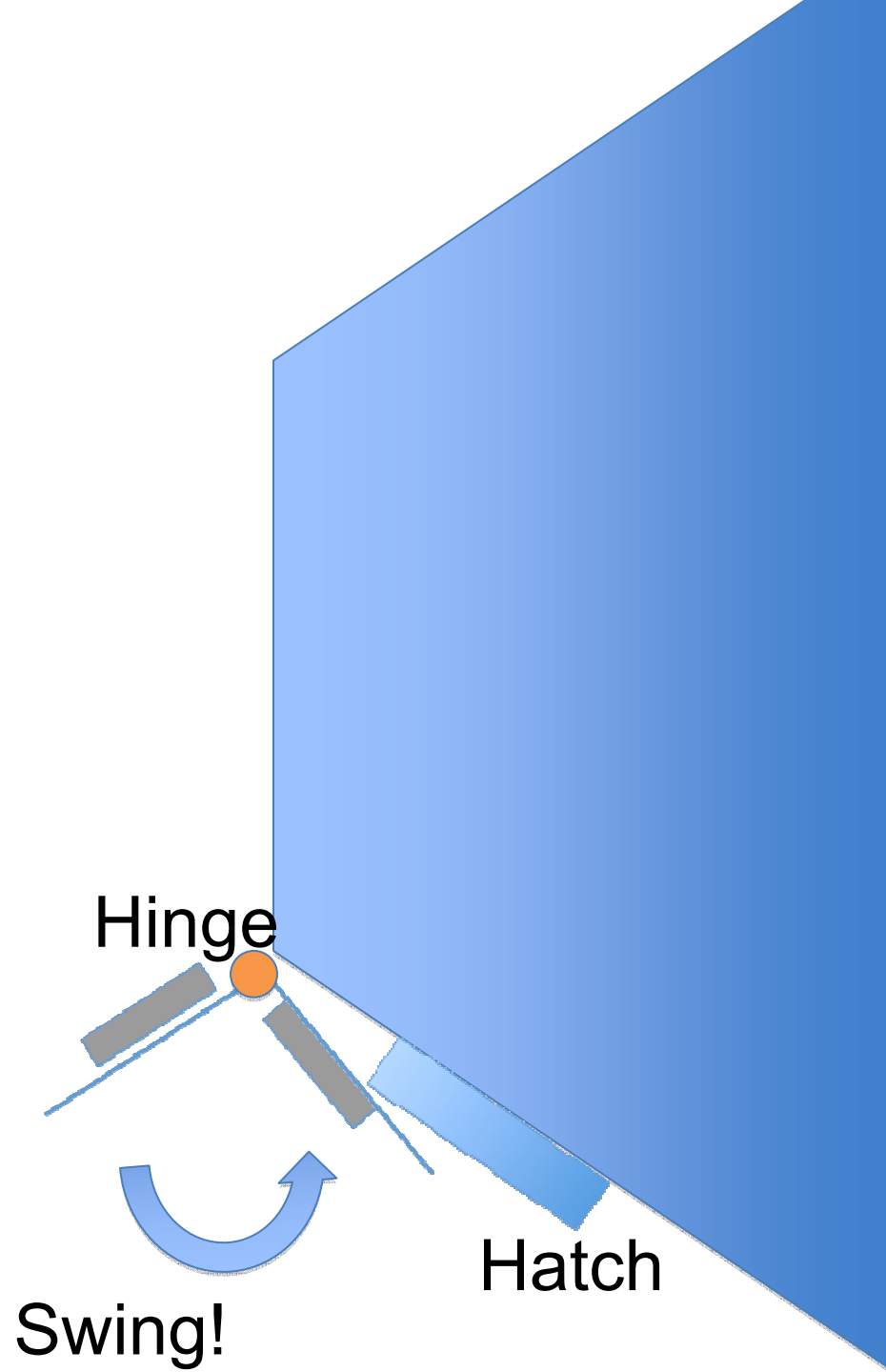
Station-1
Cables to be
Installed

8/14/08

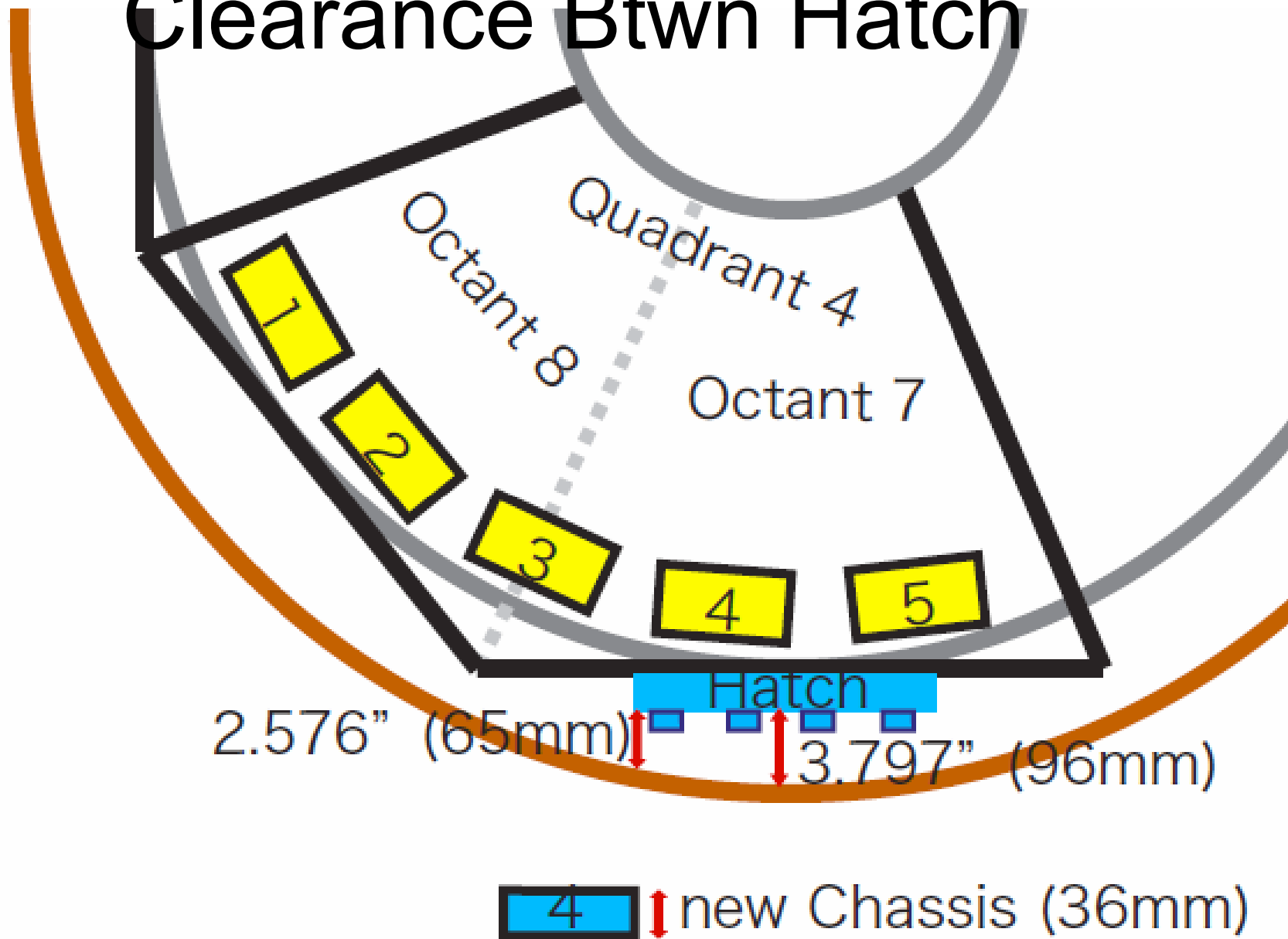
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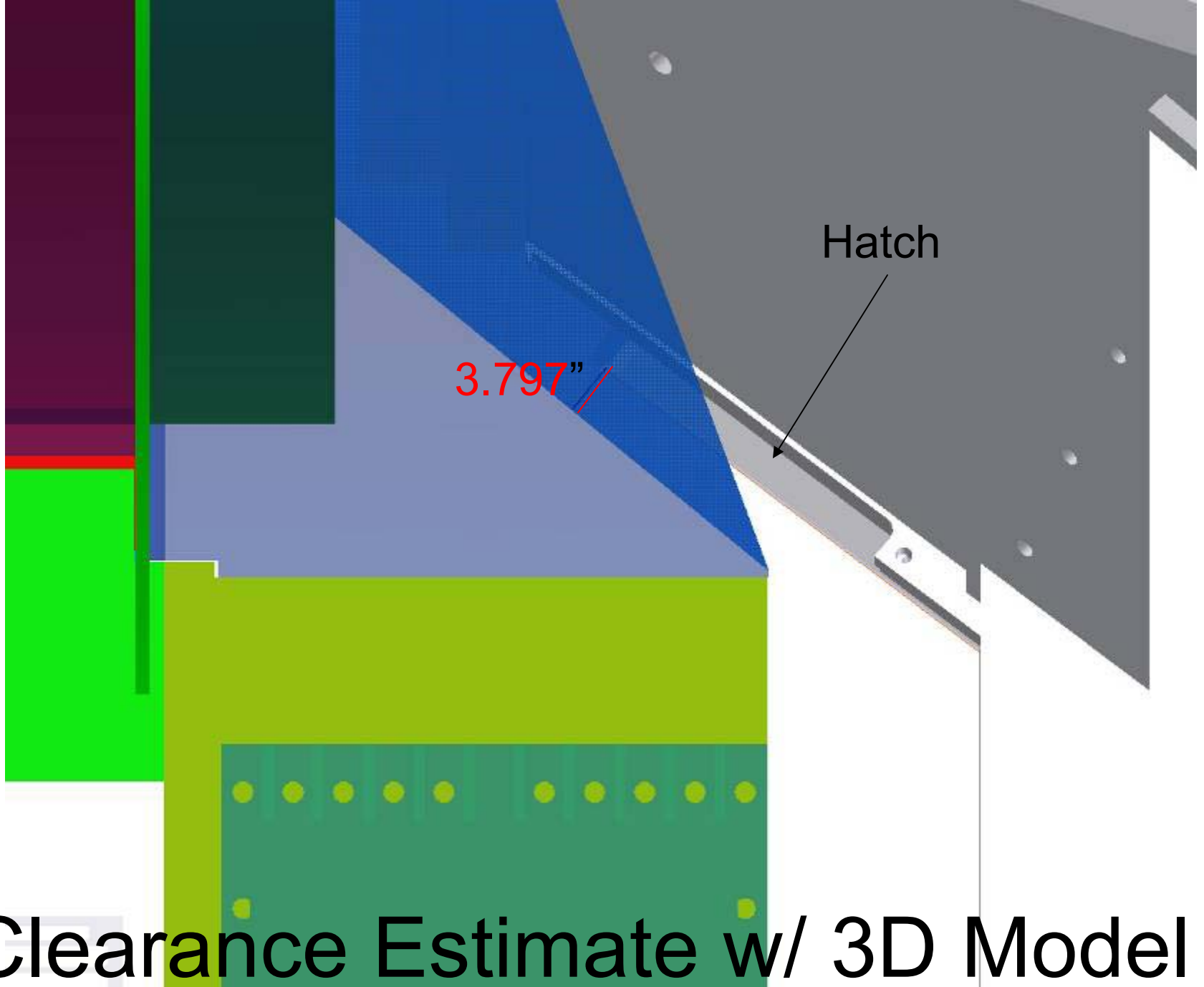


Difficulty in Station-1 Mount
Space in front of Hatch



Clearance Btwn Hatch

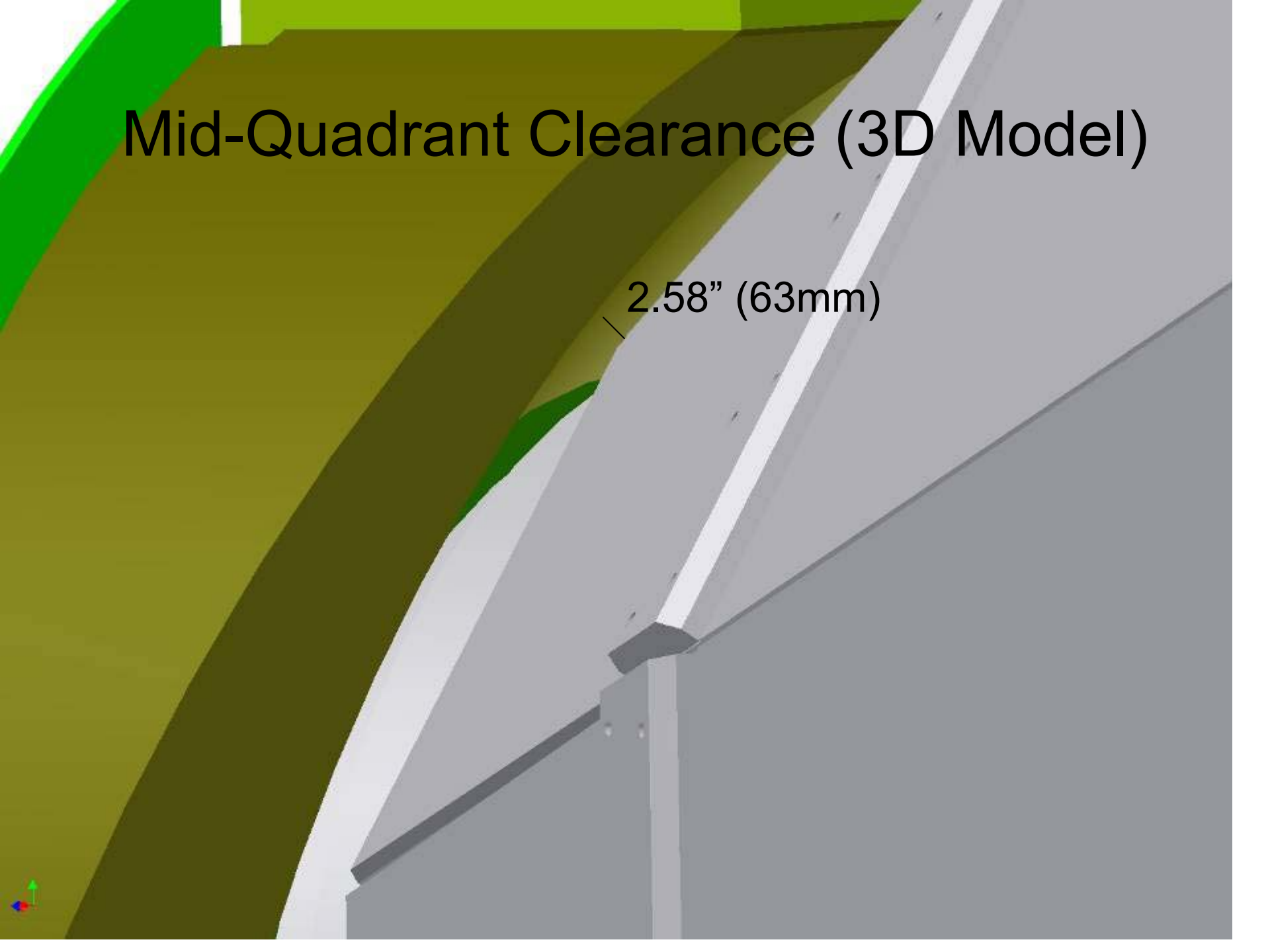




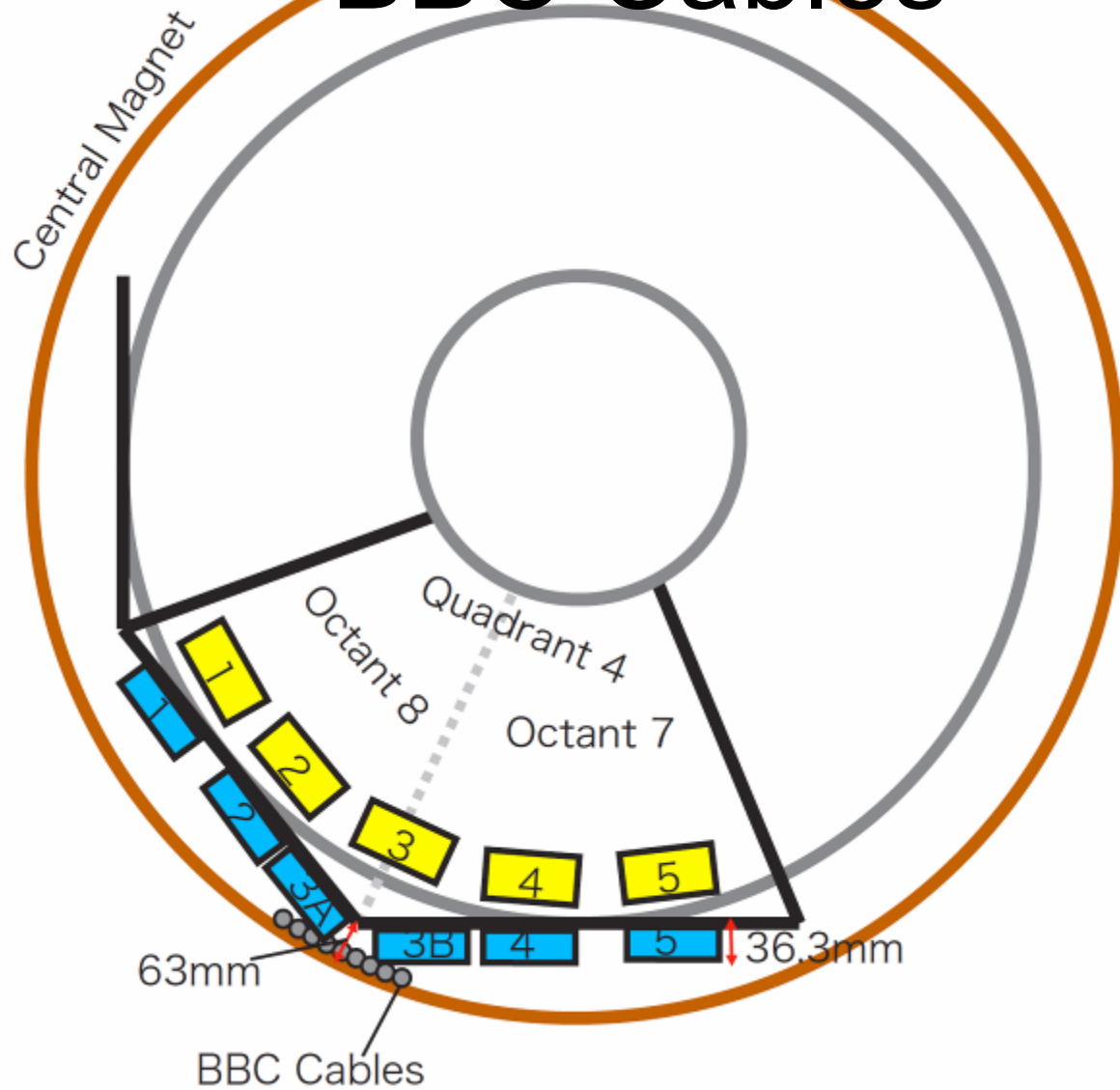
Clearance Estimate w/ 3D Model

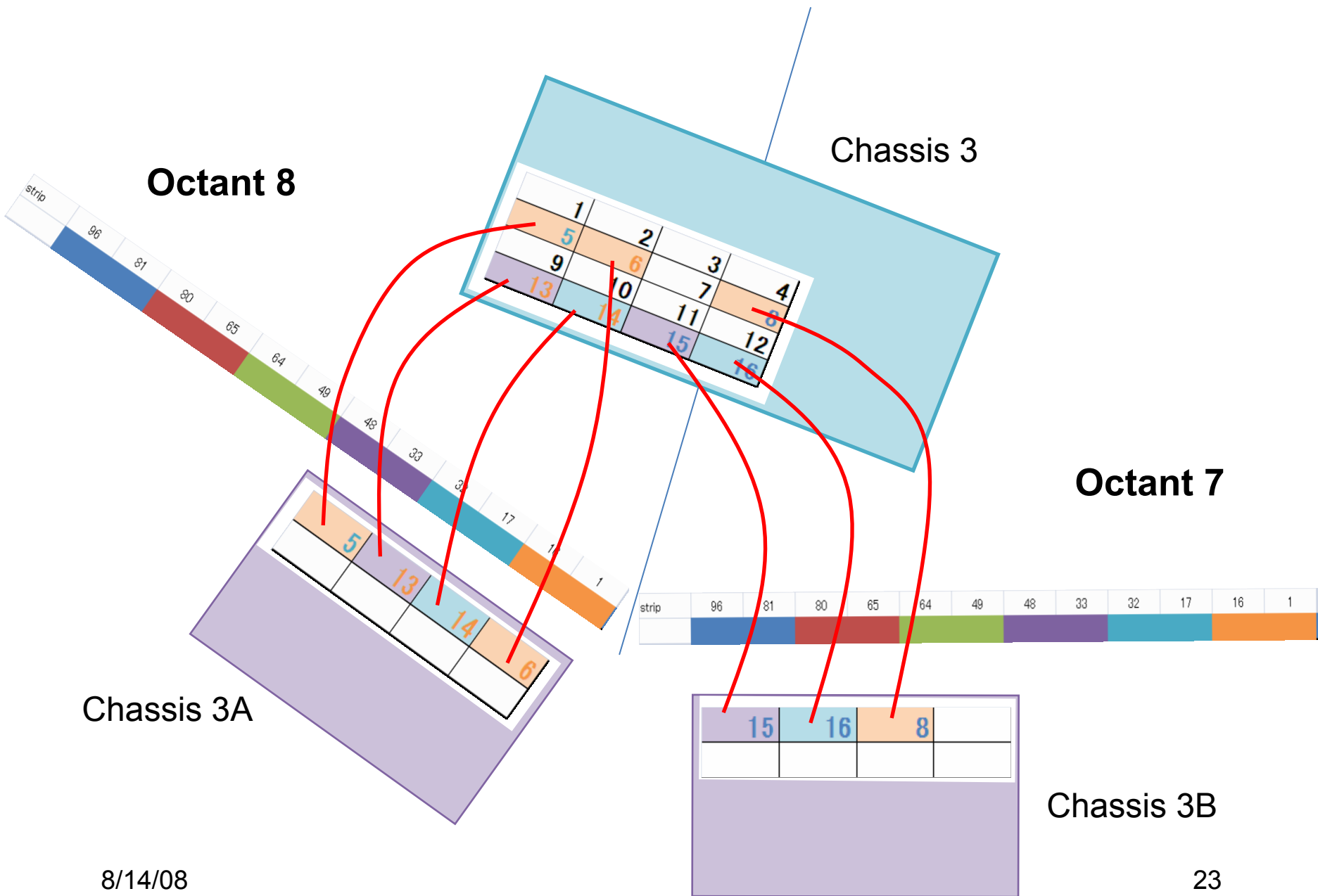
Mid-Quadrant Clearance (3D Model)

2.58" (63mm)



BBC Cables





Mu Tracker North Decapacitations

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MuTr group expects to finish North side by the end of this week



DeCap Access Platform

MuTrigger North FEE Installation



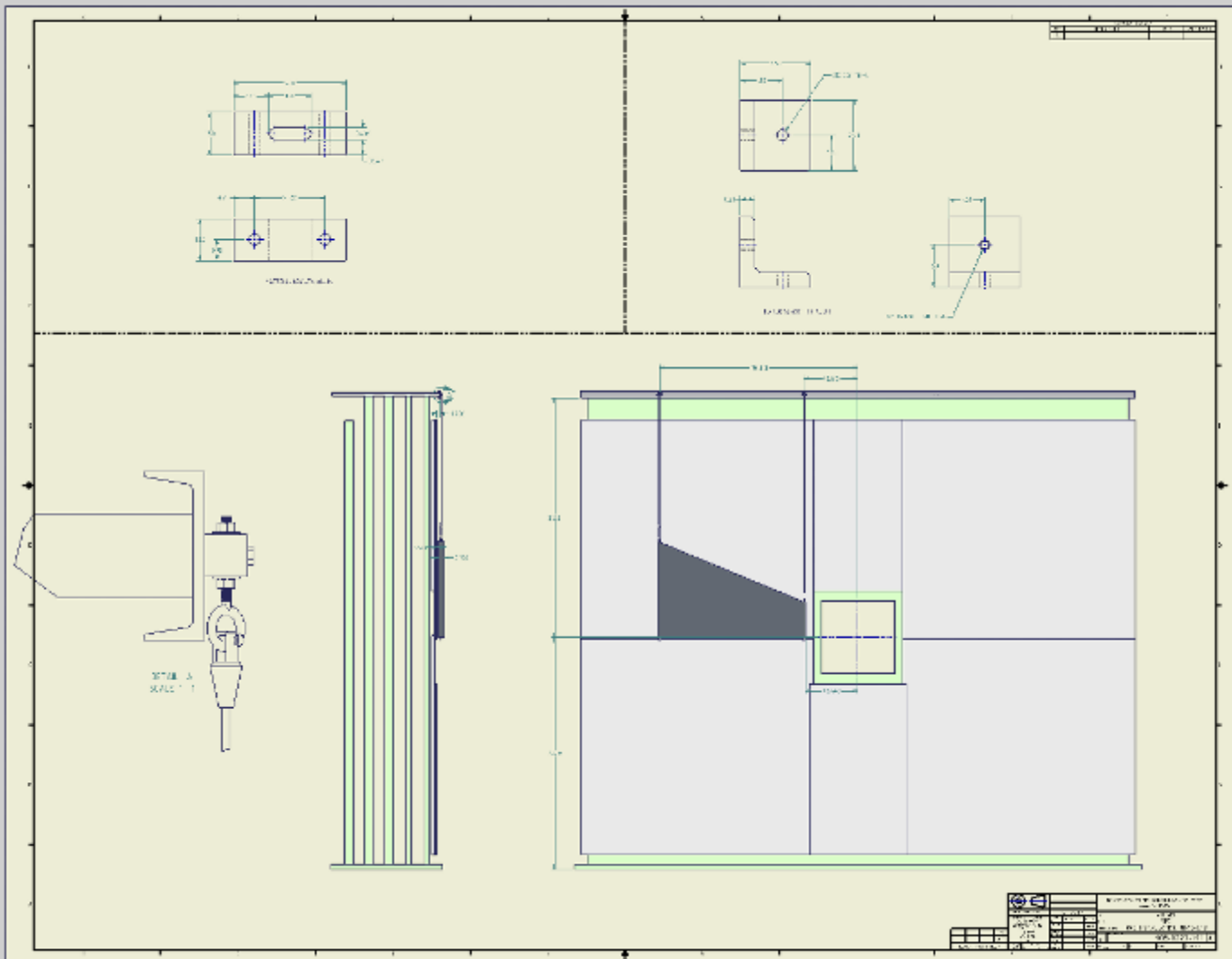
**Station 1 Chasis
test fit**



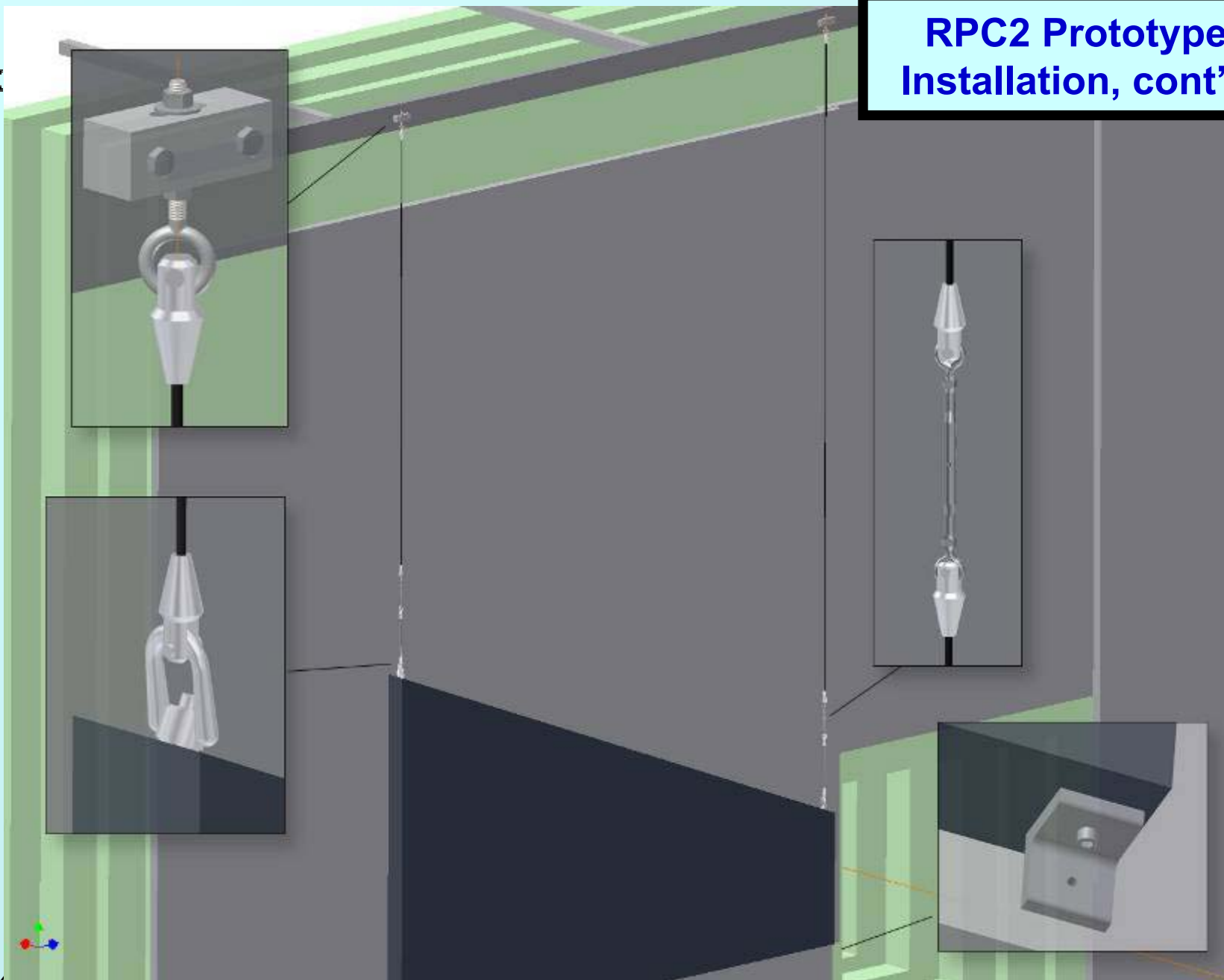
**LV and optical
cable routing**



**Rack cooling
water supply**



RPC2 Prototype Installation, cont'd



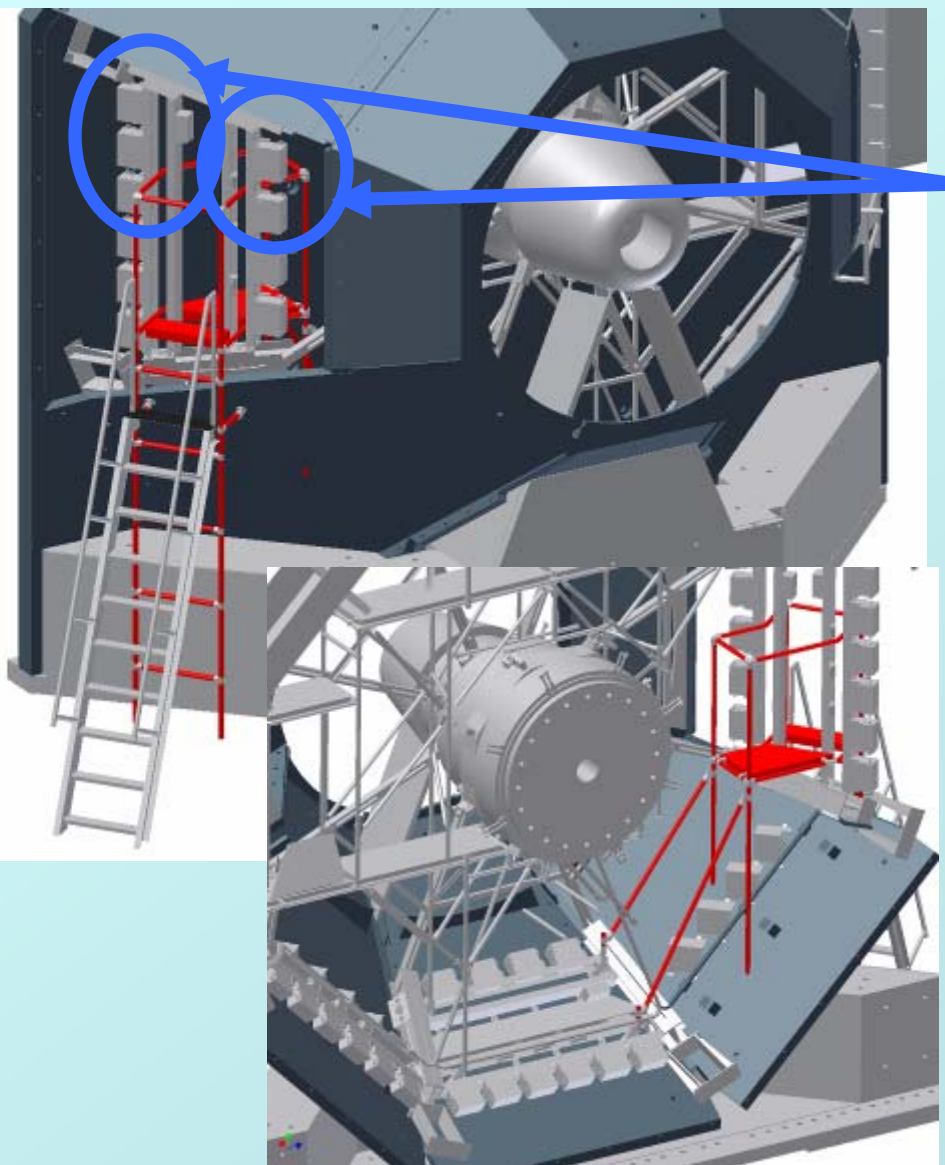
8/14/00

RPC2 Prototype Installation, cont'd



8/14/08

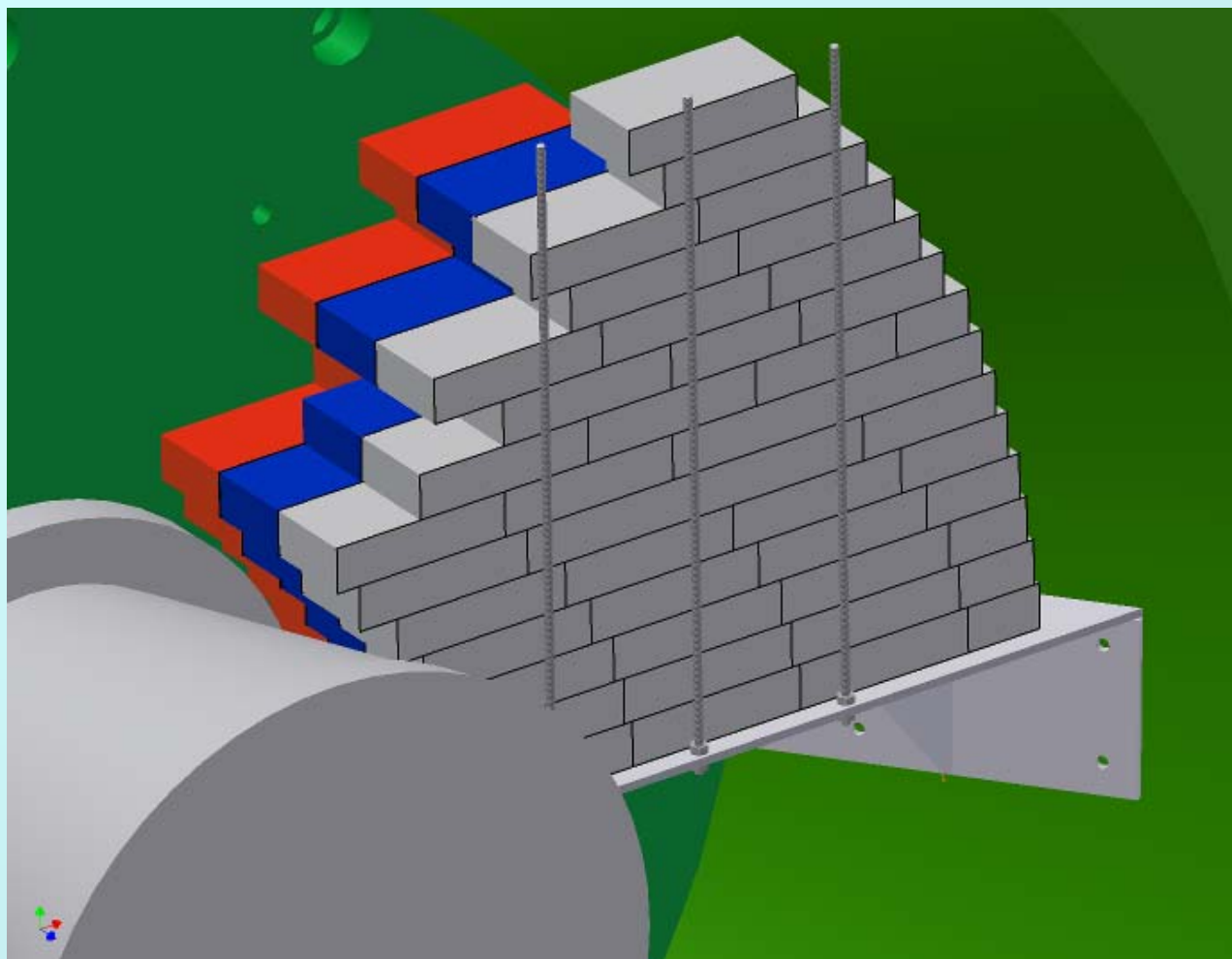
MuTrigger FEE upgrades in MMS in support of RPC prototypes



To match absorber and prototype RPC's, we need to install new FEE upgrades in these 5 MuTR FEE's

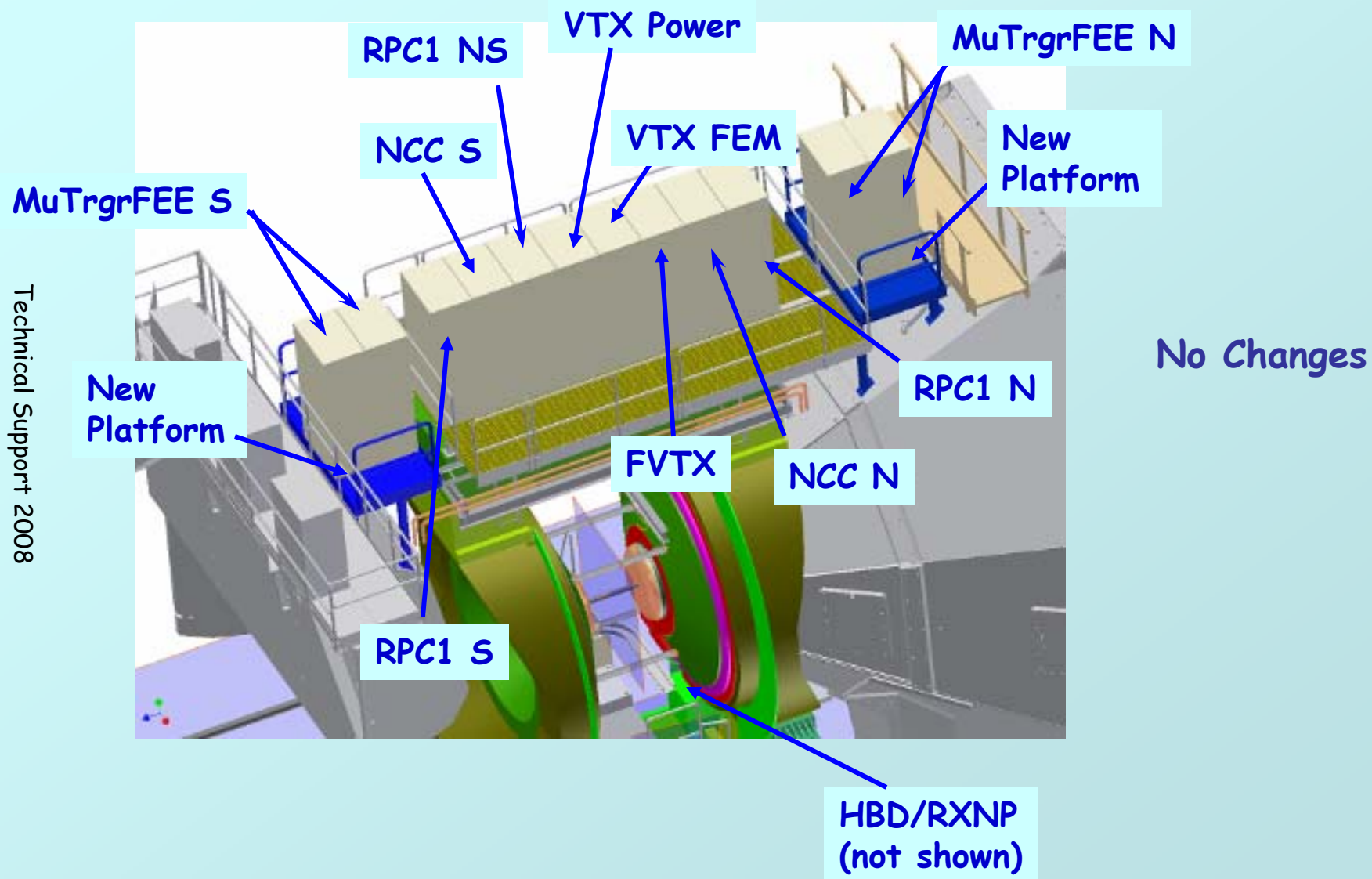
We will develop a plan to access these for installation and testing from a custom work platform (to be designed).

RPC Absorber Concept



Drawings at
CS for
estimating
Expect quote
by end of
week

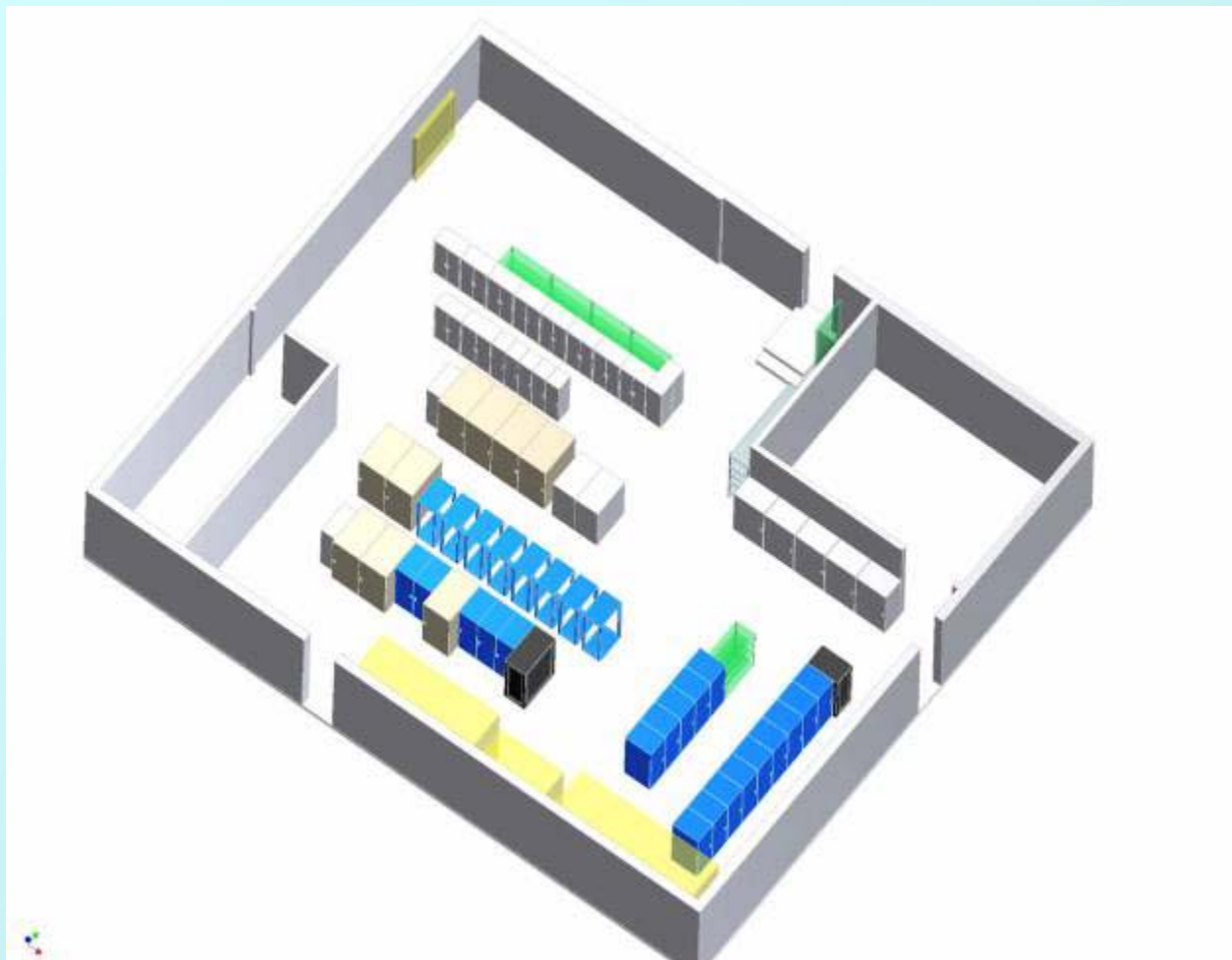
Detector upgrade Rack allotments



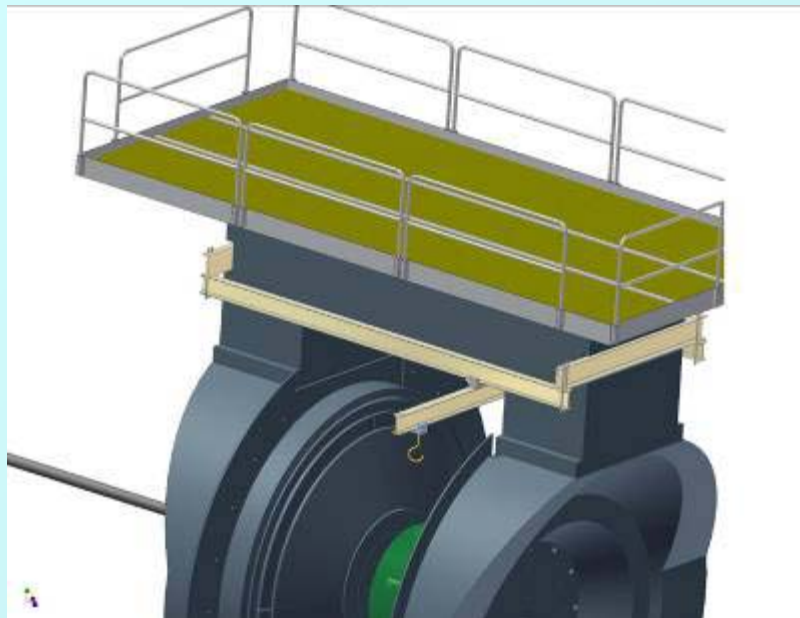
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Rack Room Reorganization

Inventor model in progress



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**CM Crane procurement postponed
Until FY09**

**Response from Vendor
(The Bartholomew Co.
local distributor for
GORBEL) received.
Sent to CA safety
for review. Most
issues fully
addressed.**

**Plan to address
remaining issues this
month, send to vendor
for requote, place
order by 9/30**



Safety, Security, etc.

2 new generic enhanced work plans at CAD:

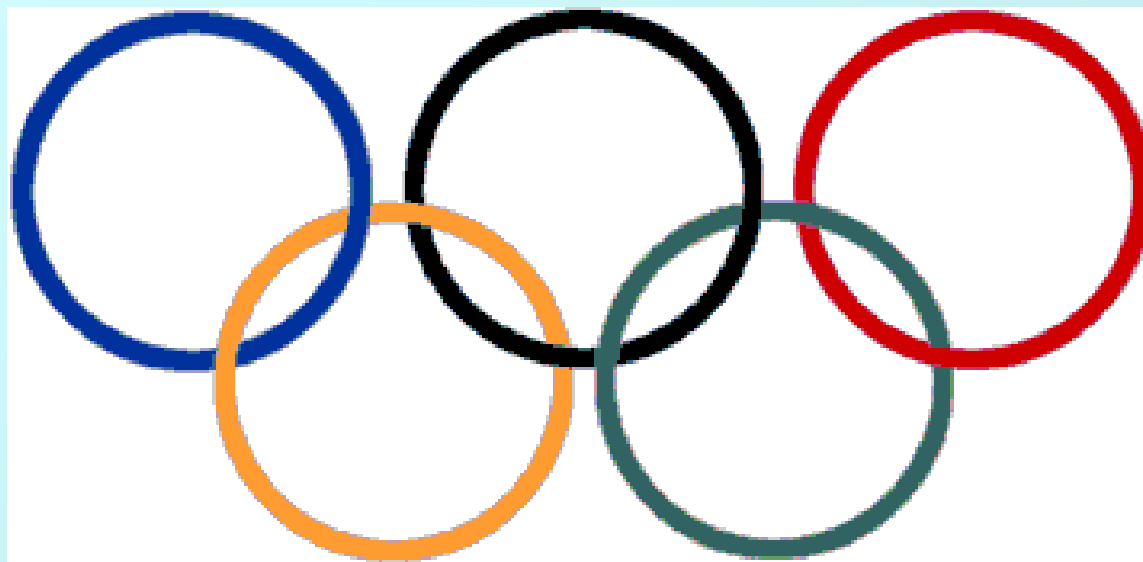
LOTO (new rules presented in CAD training sessions last month)

General Radiological Work Permit for work in CAD posted Radiation Areas (e.g. RHIC tunnel)

See Ann Marie in the CAD badge office to sign the generic WP's

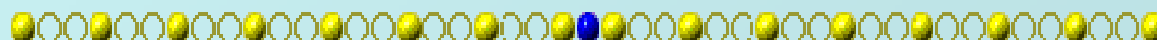
Summer Sunday Tour at PHENIX this week. Make sure everything is clean, IR roped off, easels, tables and chairs out for Achim.

Where To Find PHENIX Engineering Info



Only 11 more days and 215 more gold medals to go

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm